FIG.1

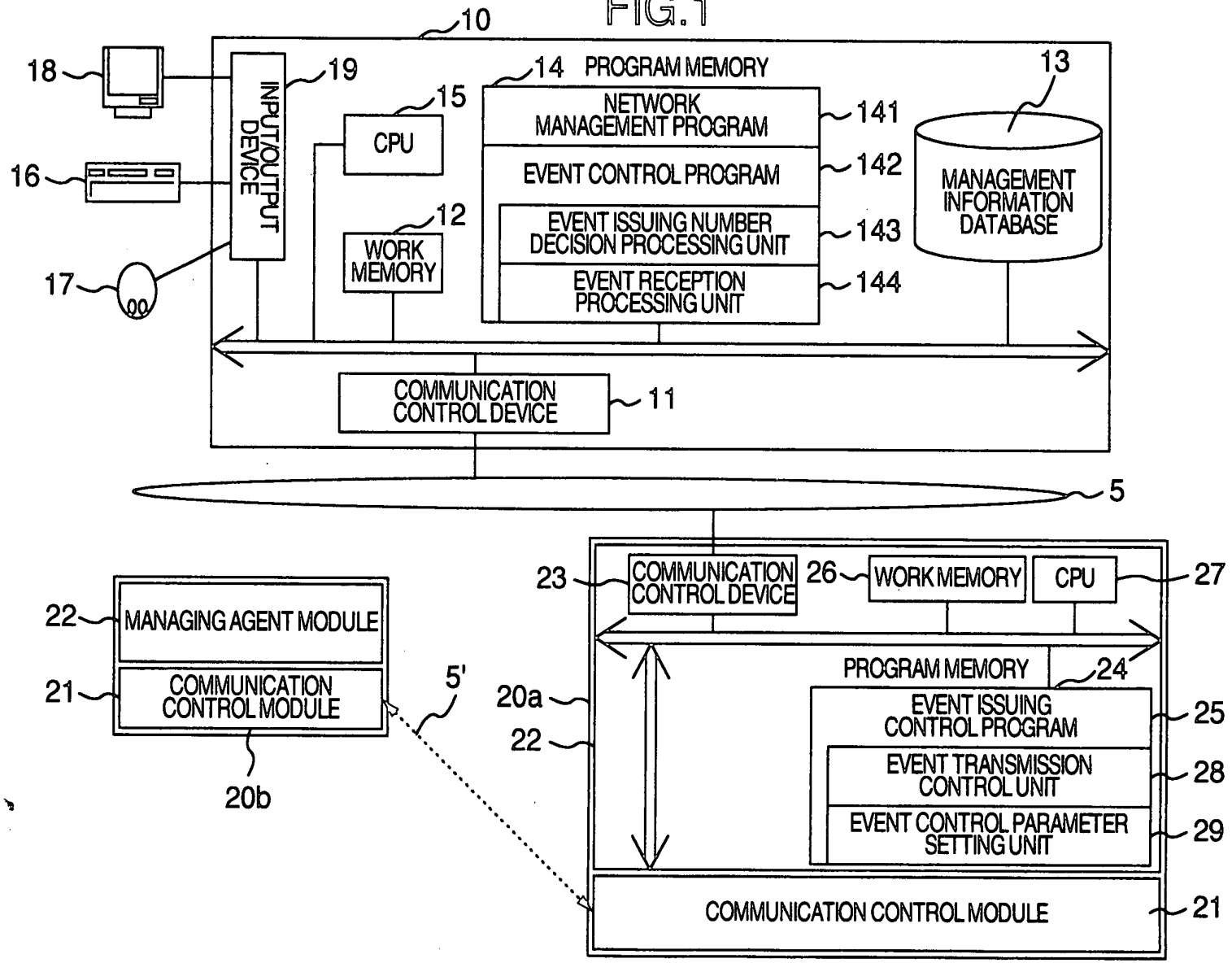

10
18
19
INPUT/OUTPUT DEVICE
14 PROGRAM MEMORY
13
15
CPU
NETWORK MANAGEMENT PROGRAM
141
16
EVENT CONTROL PROGRAM
142
MANAGEMENT INFORMATION DATABASE
12
WORK MEMORY
EVENT ISSUING NUMBER DECISION PROCESSING UNIT
143
17
EVENT RECEPTION PROCESSING UNIT
144
COMMUNICATION CONTROL DEVICE
11
5
22
MANAGING AGENT MODULE
21
COMMUNICATION CONTROL MODULE
5'
20b
23
COMMUNICATION CONTROL DEVICE
26
WORK MEMORY
CPU
27
PROGRAM MEMORY
24
20a
22
EVENT ISSUING CONTROL PROGRAM
25
EVENT TRANSMISSION CONTROL UNIT
28
EVENT CONTROL PARAMETER SETTING UNIT
29
COMMUNICATION CONTROL MODULE
21

FIG.2

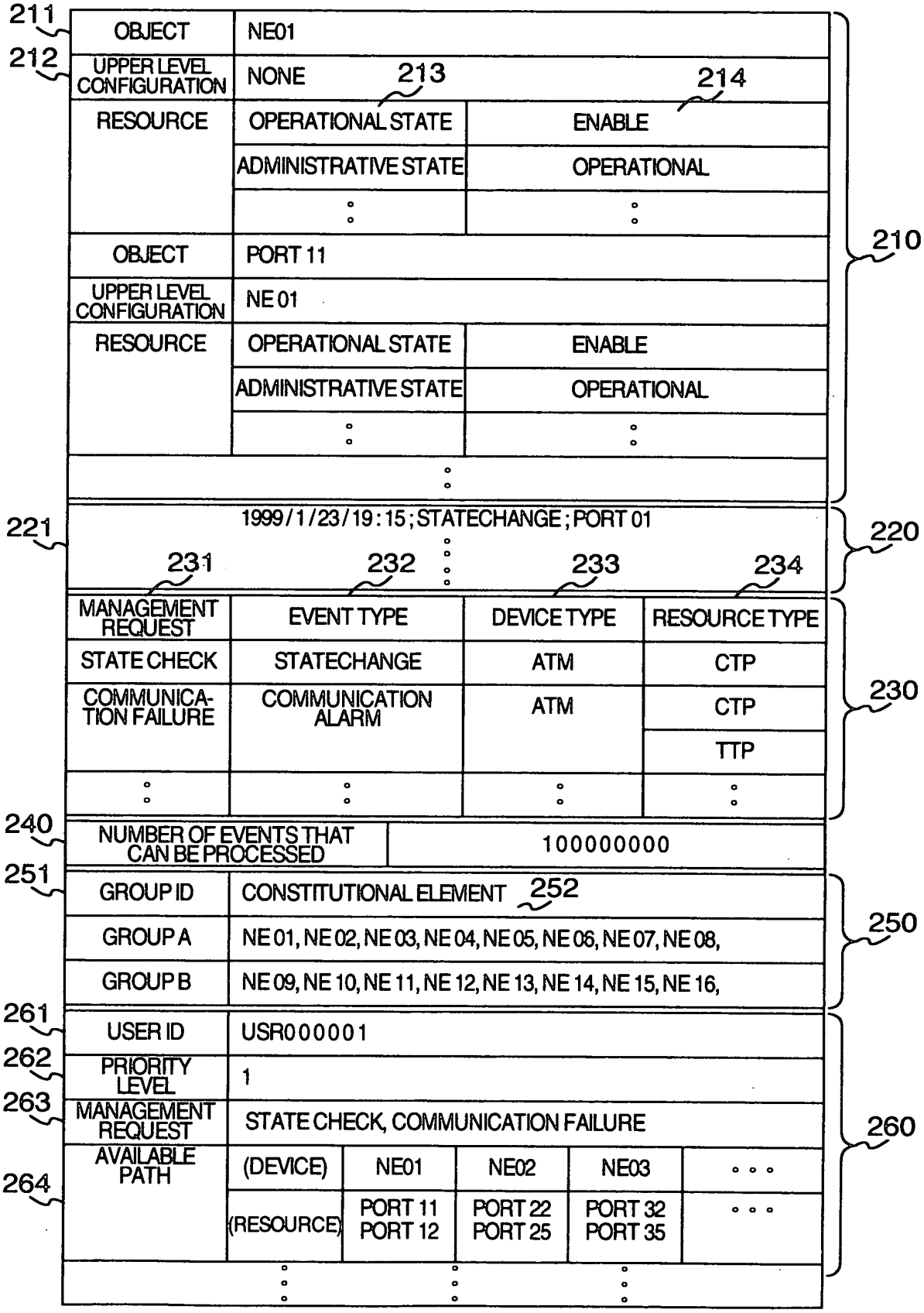

211
OBJECT
NE01
212
UPPER LEVEL CONFIGURATION
NONE
213
214
RESOURCE
OPERATIONAL STATE
ENABLE
ADMINISTRATIVE STATE
OPERATIONAL
OBJECT
PORT 11
UPPER LEVEL CONFIGURATION
NE 01
RESOURCE
OPERATIONAL STATE
ENABLE
ADMINISTRATIVE STATE
OPERATIONAL
210
221
1999/1/23/19:15;STATECHANGE;PORT 01
220
231
232
233
234
MANAGEMENT REQUEST
EVENT TYPE
DEVICE TYPE
RESOURCE TYPE
STATE CHECK
STATECHANGE
ATM
CTP
COMMUNICA-TION FAILURE
COMMUNICATION ALARM
ATM
CTP
TTP
230
240
NUMBER OF EVENTS THAT CAN BE PROCESSED
100000000
251
GROUP ID
CONSTITUTIONAL ELEMENT
252
GROUP A
NE 01, NE 02, NE 03, NE 04, NE 05, NE 06, NE 07, NE 08,
GROUP B
NE 09, NE 10, NE 11, NE 12, NE 13, NE 14, NE 15, NE 16,
250
261
USER ID
USR000001
262
PRIORITY LEVEL
1
263
MANAGEMENT REQUEST
STATE CHECK, COMMUNICATION FAILURE
AVAILABLE PATH
264
(DEVICE)
NE01
NE02
NE03
(RESOURCE)
PORT 11
PORT 12
PORT 22
PORT 25
PORT 32
PORT 35
260

FIG.3

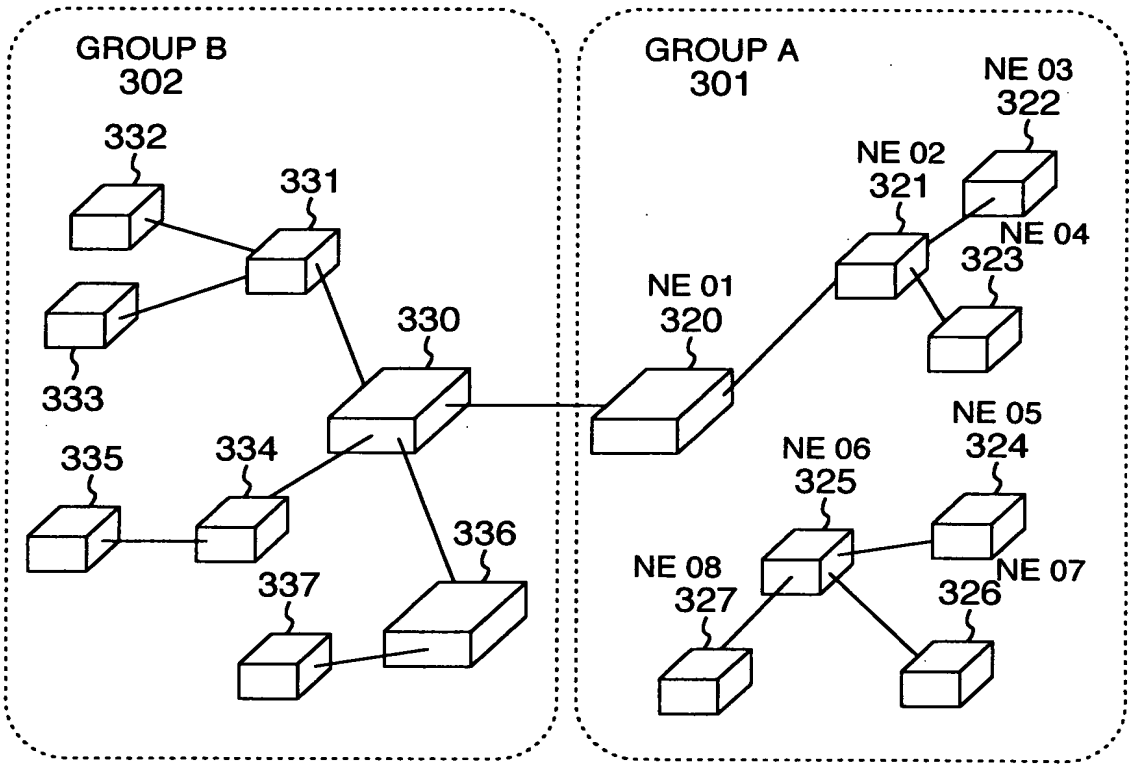
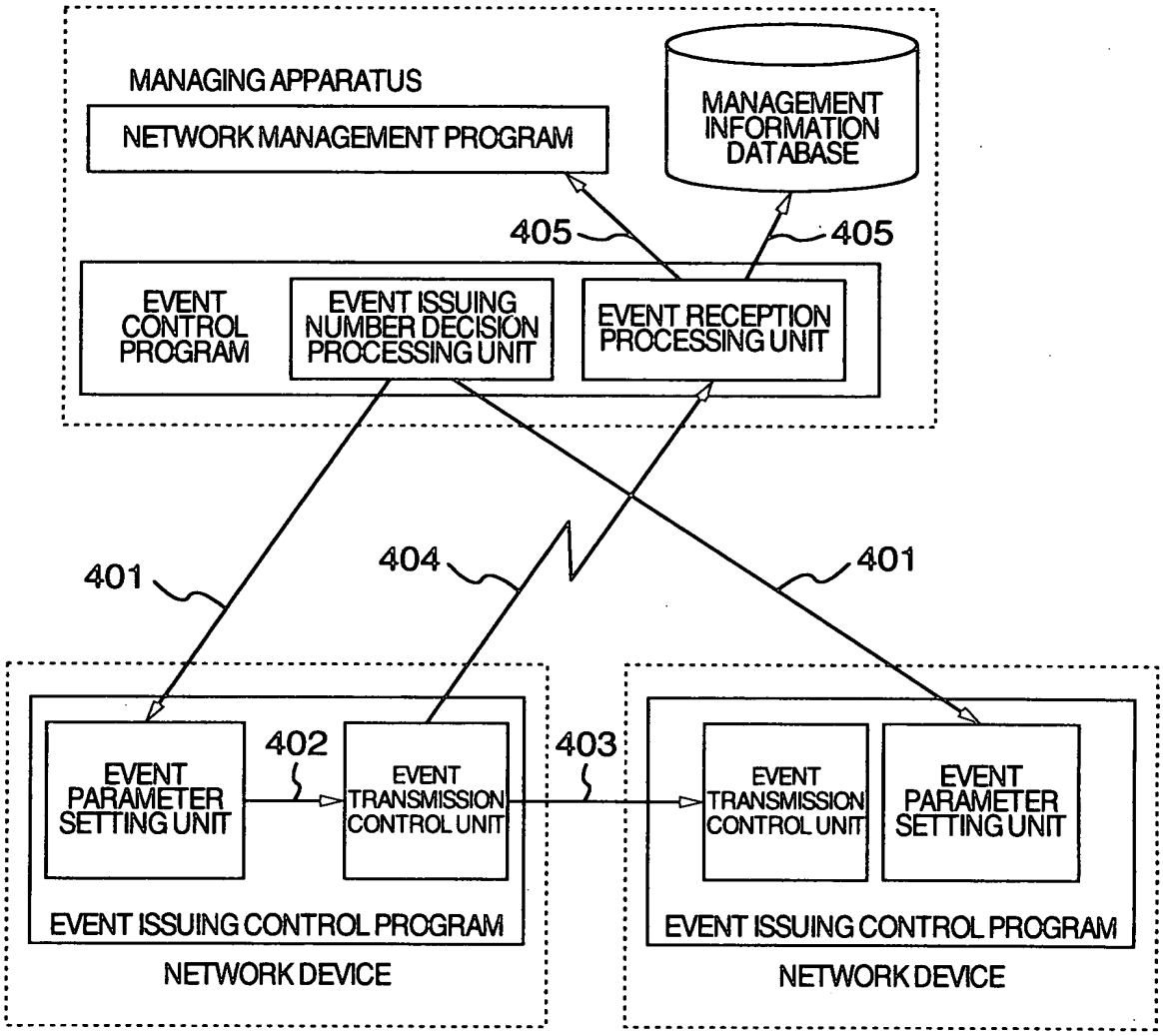

GROUP B
302
GROUP A
301
332
331
333
330
335
334
336
337
NE 01
320
NE 02
321
NE 03
322
NE 04
323
NE 05
324
NE 06
325
NE 07
326
NE 08
327

FIG.4



401: NOTIFICATION OF EVENT FILTER CONTROL INFORMATION
402: NOTIFICATION OF FILTERING PARAMETER
403: NOTIFICATION OF EVENT ISSUING
404: EVENT
405: NOTIFICATION AND STORAGE OF EVENT

FIG.5

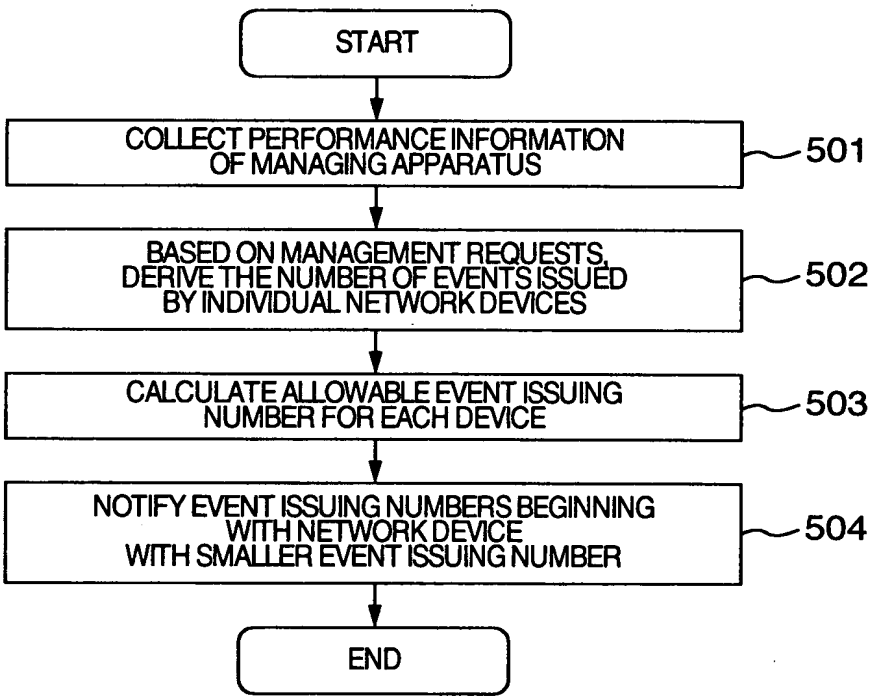

START
COLLECT PERFORMANCE INFORMATION OF MANAGING APPARATUS
501
BASED ON MANAGEMENT REQUESTS, DERIVE THE NUMBER OF EVENTS ISSUED BY INDIVIDUAL NETWORK DEVICES
502
CALCULATE ALLOWABLE EVENT ISSUING NUMBER FOR EACH DEVICE
503
NOTIFY EVENT ISSUING NUMBERS BEGINNING WITH NETWORK DEVICE WITH SMALLER EVENT ISSUING NUMBER
504
END

FIG.6

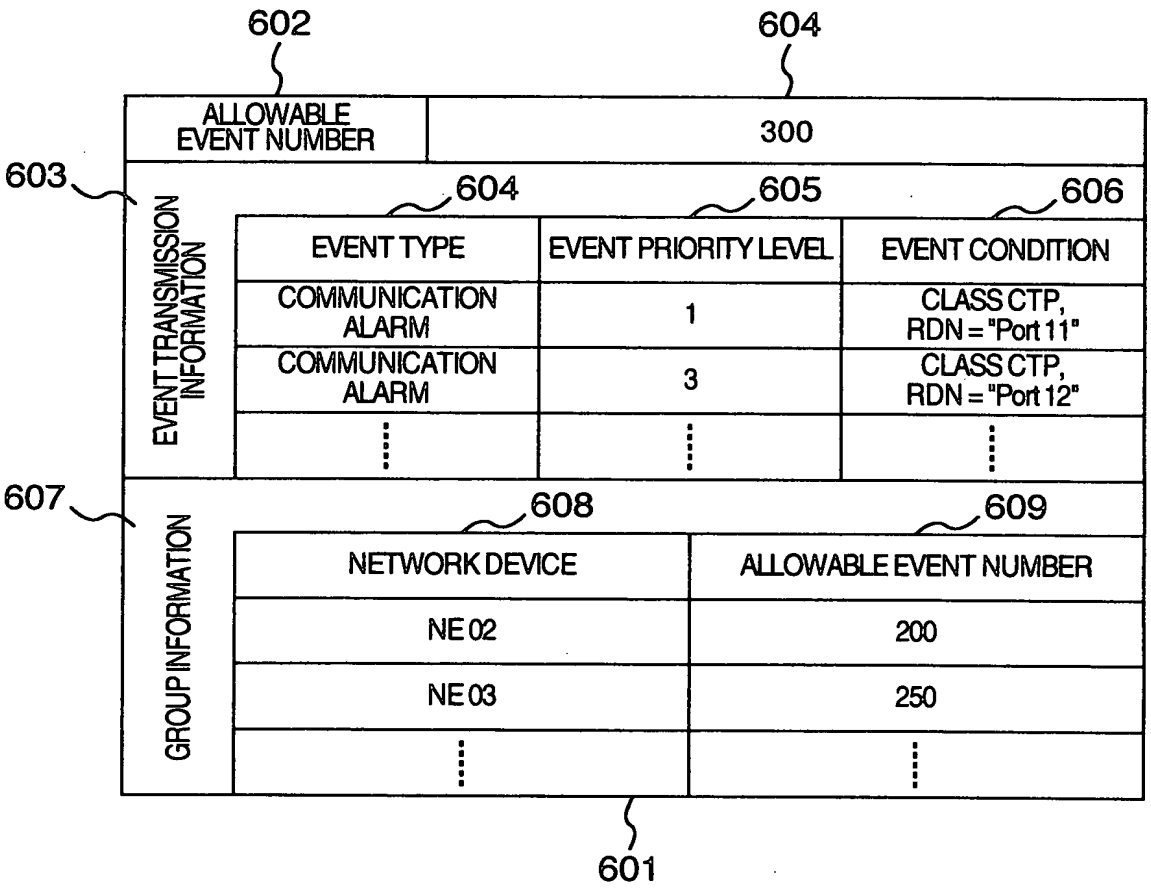

602
604
ALLOWABLE EVENT NUMBER
300
603
604
605
606
EVENT TRANSMISSION INFORMATION
EVENT TYPE
EVENT PRIORITY LEVEL
EVENT CONDITION
COMMUNICATION ALARM
1
CLASS CTP, RDN = "Port 11"
COMMUNICATION ALARM
3
CLASS CTP, RDN = "Port 12"
607
608
609
GROUP INFORMATION
NETWORK DEVICE
ALLOWABLE EVENT NUMBER
NE 02
200
NE 03
250
601

FIG.7

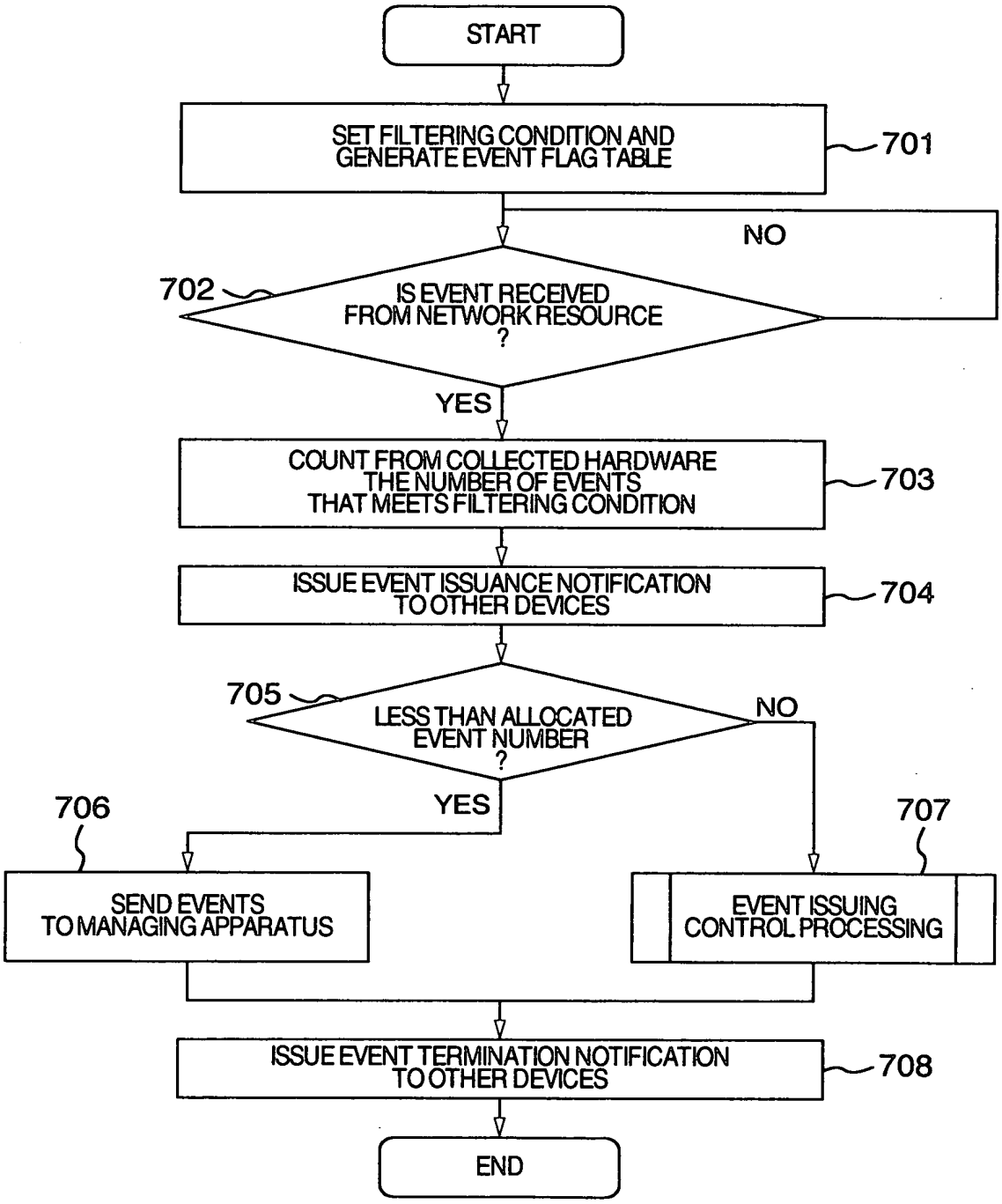

START
SET FILTERING CONDITION AND GENERATE EVENT FLAG TABLE
701
NO
702
IS EVENT RECEIVED FROM NETWORK RESOURCE ?
YES
COUNT FROM COLLECTED HARDWARE THE NUMBER OF EVENTS THAT MEETS FILTERING CONDITION
703
ISSUE EVENT ISSUANCE NOTIFICATION TO OTHER DEVICES
704
705
LESS THAN ALLOCATED EVENT NUMBER ?
NO
YES
706
707
SEND EVENTS TO MANAGING APPARATUS
EVENT ISSUING CONTROL PROCESSING
ISSUE EVENT TERMINATION NOTIFICATION TO OTHER DEVICES
708
END

FIG.8

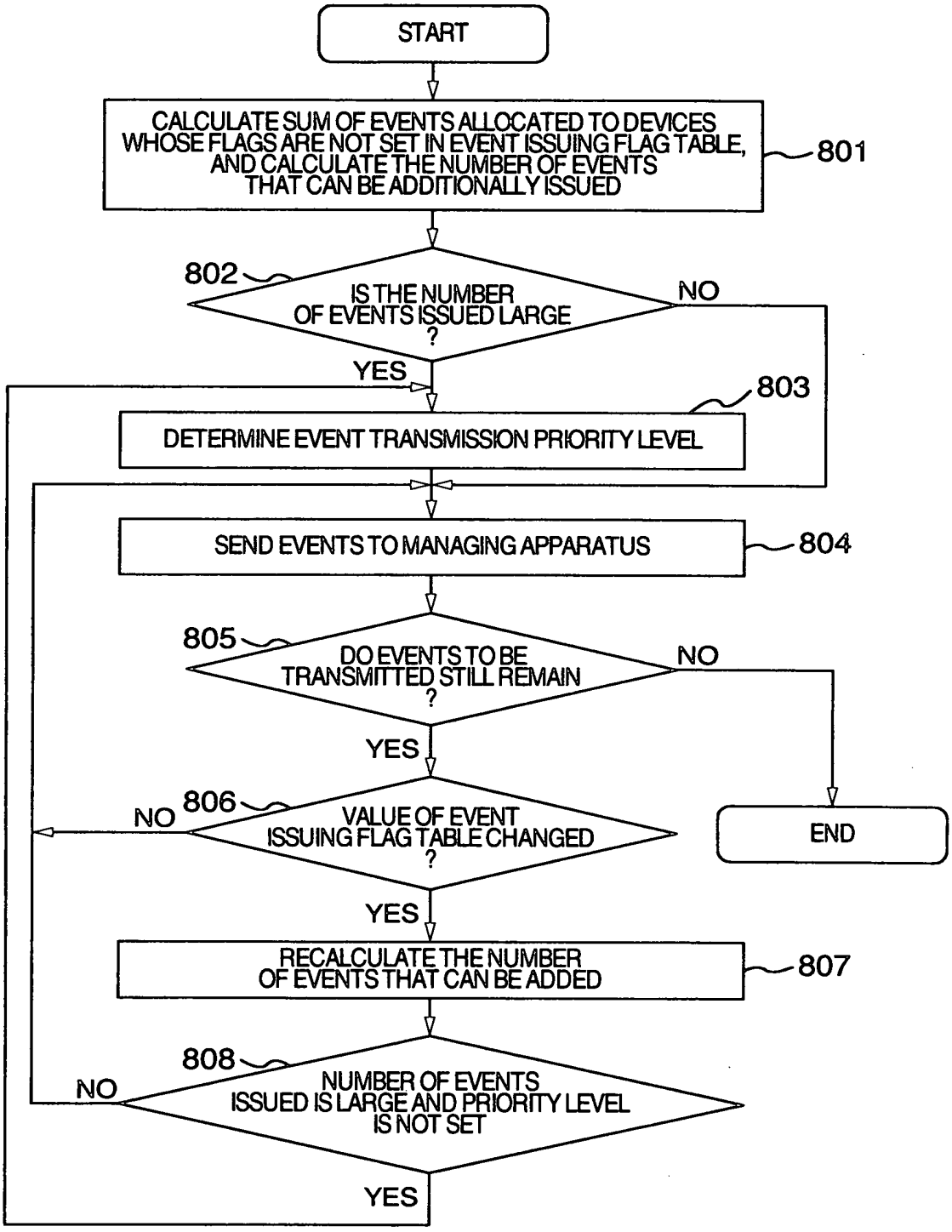
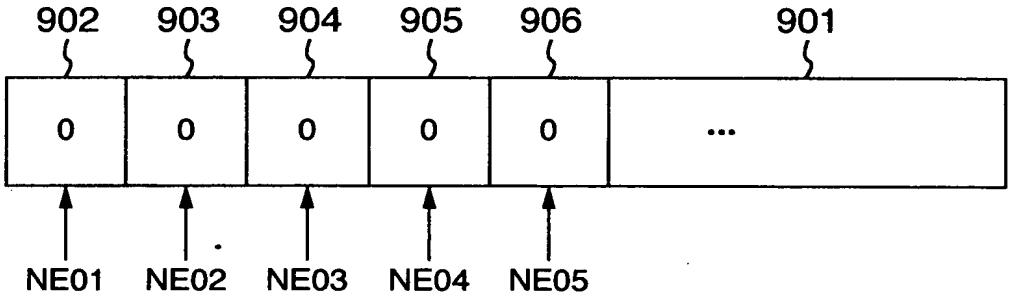

START
CALCULATE SUM OF EVENTS ALLOCATED TO DEVICES WHOSE FLAGS ARE NOT SET IN EVENT ISSUING FLAG TABLE, AND CALCULATE THE NUMBER OF EVENTS THAT CAN BE ADDITIONALLY ISSUED
801
802
IS THE NUMBER OF EVENTS ISSUED LARGE ?
NO
YES
803
DETERMINE EVENT TRANSMISSION PRIORITY LEVEL
SEND EVENTS TO MANAGING APPARATUS
804
805
DO EVENTS TO BE TRANSMITTED STILL REMAIN ?
NO
YES
806
NO
VALUE OF EVENT ISSUING FLAG TABLE CHANGED ?
END
YES
RECALCULATE THE NUMBER OF EVENTS THAT CAN BE ADDED
807
808
NO
NUMBER OF EVENTS ISSUED IS LARGE AND PRIORITY LEVEL IS NOT SET
YES

FIG.9



0: EVENT NOT ISSUED
1: EVENT ISSUED

FIG.10

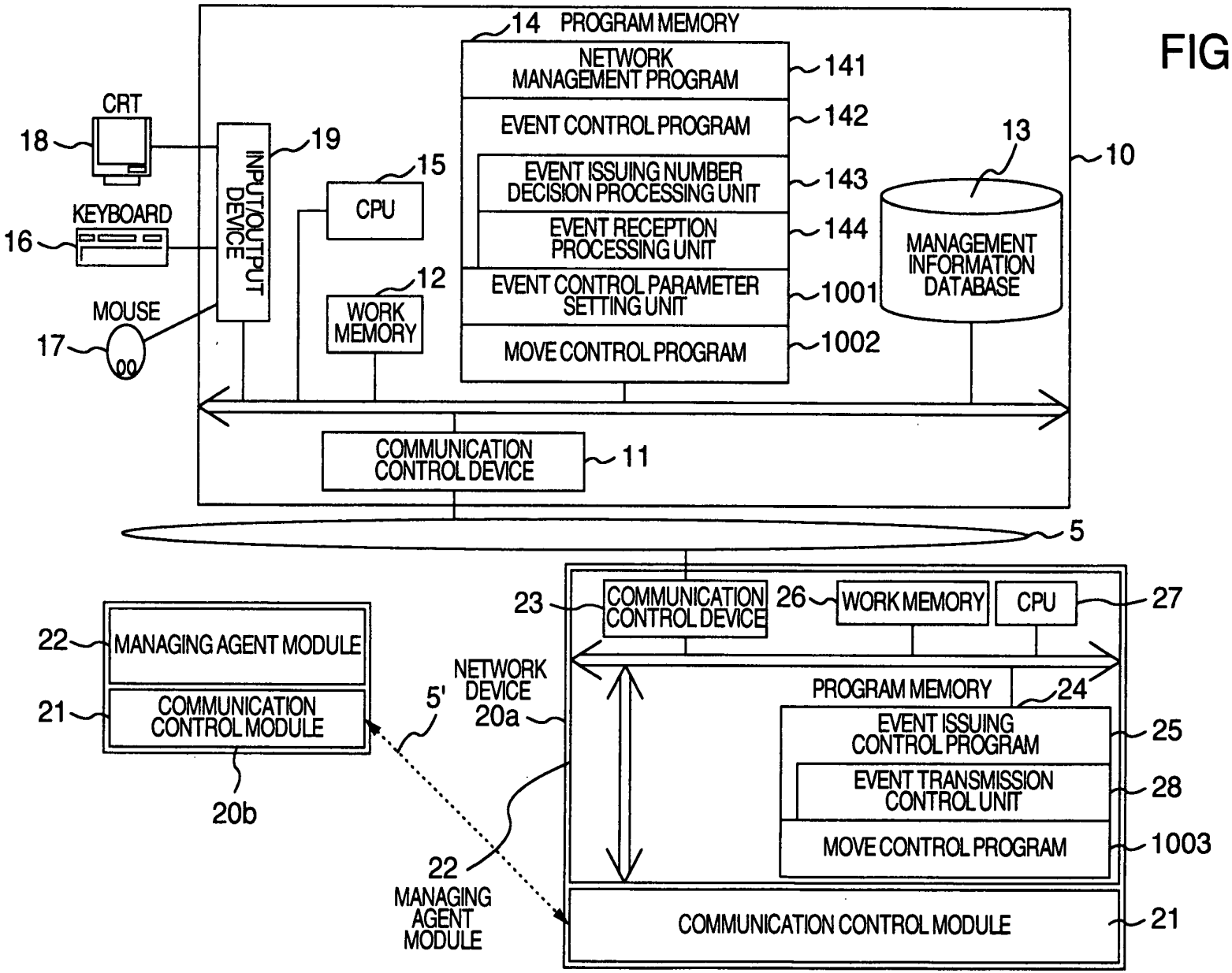
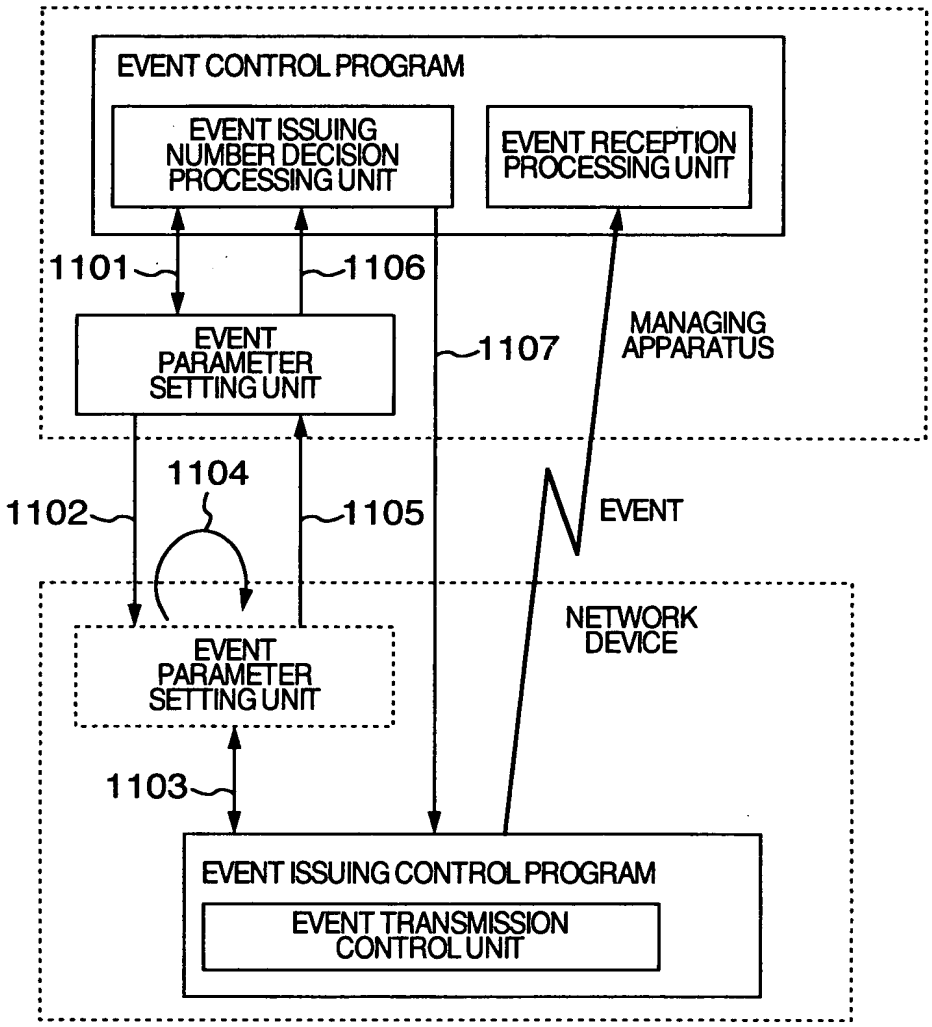
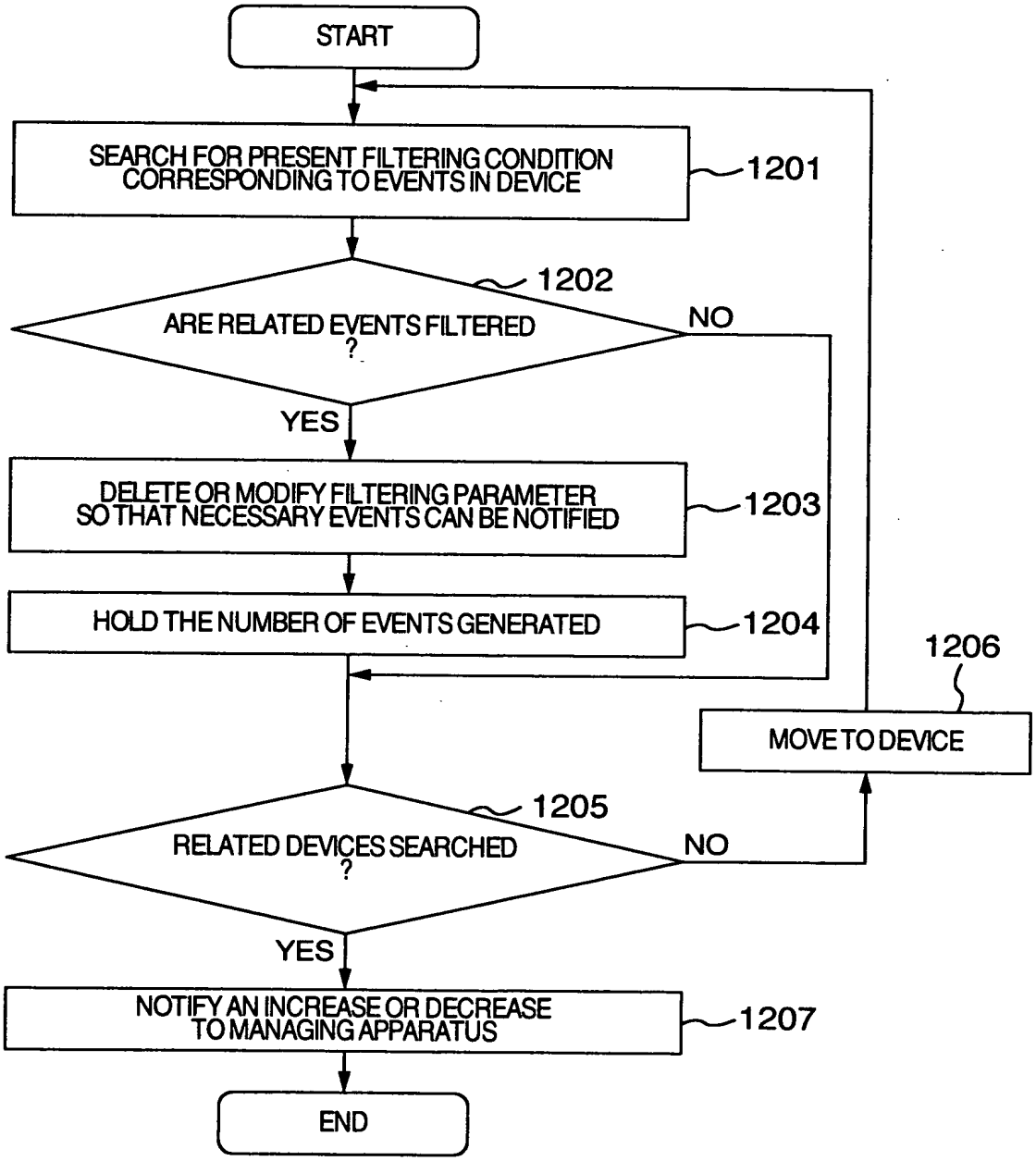

14 PROGRAM MEMORY
NETWORK MANAGEMENT PROGRAM
141
EVENT CONTROL PROGRAM
142
EVENT ISSUING NUMBER DECISION PROCESSING UNIT
143
EVENT RECEPTION PROCESSING UNIT
144
EVENT CONTROL PARAMETER SETTING UNIT
1001
MOVE CONTROL PROGRAM
1002
CRT
18
19
INPUT/OUTPUT DEVICE
KEYBOARD
16
MOUSE
17
15
CPU
12
WORK MEMORY
13
MANAGEMENT INFORMATION DATABASE
10
COMMUNICATION CONTROL DEVICE
11
5
22
MANAGING AGENT MODULE
21
COMMUNICATION CONTROL MODULE
20b
5'
NETWORK DEVICE
20a
23
COMMUNICATION CONTROL DEVICE
26
WORK MEMORY
CPU
27
PROGRAM MEMORY
24
EVENT ISSUING CONTROL PROGRAM
25
EVENT TRANSMISSION CONTROL UNIT
28
MOVE CONTROL PROGRAM
1003
22
MANAGING AGENT MODULE
COMMUNICATION CONTROL MODULE
21

FIG.11



1101: EVENT TYPE AND SETTING PATH
1102: MOVING
1103: COLLECTION OF EVENT FILTER INFORMATION, CHANGE OF FILTERING CONDITION
1104: MOVING TO OTHER NETWORK DEVICE
1105: MOVING
1106: NOTIFICATION OF INCREASED OR DECREASED NUMBER OF EVENTS ISSUED FROM NETWORK DEVICE ON SET PATH
1107: NOTIFICATION OF ALLOWABLE EVENT NUMBER

FIG.12


START
SEARCH FOR PRESENT FILTERING CONDITION CORRESPONDING TO EVENTS IN DEVICE
1201
ARE RELATED EVENTS FILTERED ?
1202
NO
YES
DELETE OR MODIFY FILTERING PARAMETER SO THAT NECESSARY EVENTS CAN BE NOTIFIED
1203
HOLD THE NUMBER OF EVENTS GENERATED
1204
1206
MOVE TO DEVICE
RELATED DEVICES SEARCHED ?
1205
NO
YES
NOTIFY AN INCREASE OR DECREASE TO MANAGING APPARATUS
1207
END